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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,975	04/20/2006	Holger Krummel	851.0015.U1(US)	8160
29683 7590 11/04/2009 HARRINGTON & SMITH, PC 4 RESEARCH DRIVE, Suite 202 SHELTON, CT 06484-6212				
EXAMINER VAUGHAN, MICHAEL R				
ART UNIT 2431		PAPER NUMBER		
MAIL DATE 11/04/2009		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/576,975

Applicant(s)

KRUMMEL ET AL.

Examiner

MICHAEL R. VAUGHAN

Art Unit

2431

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10-27-09.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 and 34-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 and 34-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

The instant application having Application No. 10/576975 is presented for examination by the examiner. Claims 1-30 and 34-37 are pending. The action is in response to the supplemental action filed 10/27/09.

Claim Objections

Claims 1-30 and 34-37 are objected to because of the following: the user's desire is not substantiated by the specification. There is no way to quantify the user's desire to not be interrupted. There is only a vague coupling between the operational mode and the interruption. The invention is interpreted as having two modes which are not dependent on the user's interruption because of the aforementioned reasons. The apparatus can work in a mode where the user does not have to be involved and another mode in which user interaction is required. In other words there is a two choice decision with respect to the operational modes, in which the desires of the user are not one of the inputs for how the apparatus decides the mode. The apparatus cannot measure the "want" of the user.

Claim 12 is objected to because of the following informalities: "the apparatus" in the last limitation should refer to the second apparatus. Appropriate correction is required.

Claim 30 is objected to because of the following informalities: there appears to be a grammatical error between "a different apparatus the user interface" Appropriate correction is required.

Response to Arguments

Applicant's arguments with respect to claims 1-30 and 34-37 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5-15, 17-24, 26-30, 34, 35, and 37 are rejected under 35 U.S.C. 102(b) as being anticipated by USP Application Publication 2002/0132605 to Smeets et al., hereinafter Smeets.

As per claim 1, Smeets teaches generating by a first apparatus which controls access to a radio communications network a shared secret at the first apparatus (0013)

and storing the shared secret in a memory of the first apparatus, wherein the stored secret is associated with an operational mode of the first apparatus (0014);

making the stored shared secret available at a second apparatus (0016 and 0042);

receiving a signal from the second apparatus to establish communication with the first apparatus on the radio communications network, where the signal comprises a request for a required service from the first apparatus (0016-0017);

determining whether the first apparatus is in the operational mode where a user of the first apparatus does not want to be interrupted and whether the required service is associated with the stored shared secret [In this limitation the notion a user not wanting to be interrupted does not carry much patentable weight because the desires of the user cannot be measured. For example, a user could put a do-not-disturb message on his buddy list. However, cases can be made for times when he/she would still want to be interrupted (like an emergency) when in that mode. Likewise, a user may still not want to be interrupted by annoying people even if he/she is in an available mode. For purposes of examining the "not wanting interruption" is interpreted as a function in which the apparatus can still authenticate without the user having to do any of the normal pairing/inputs, as in the case when the second apparatus has already been prior recognized by the first apparatus and can merely be automatically reconnected.

Smeets teaches this arrangement in which the user need not be interrupted to reconnect his apparatus to the first apparatus (0019 and Fig. 4); and

for the case where it is determined that the first apparatus is in the operational mode where the user of the first apparatus does not want to be interrupted and the required service is associated with the stored shared secret based on the determining, then creating a secret key for use in pairing to secure communication between them, where the secret key is created using an algorithm (0019 and 0041), or else

prompting the user of the first apparatus to enter a shared secret associated with the requested service [even though the user handles the second apparatus, he/she is subscribing to the services afforded by the first apparatus. Thus the user is also a user of the first apparatus; 0124].

As per claim 2, Smeets teaches where the algorithm uses one of the stored shared secret and the shared secret entered by the user as an input to the algorithm (0124-0125).

As per claim 3, Smeets teaches based on at least the created secret key, establishing the communication with the second apparatus and providing the requested service to the second apparatus (0021).

As per claim 5, Smeets teaches selecting the operational modes where the user of the first apparatus does not want to be interrupted (Figure 4, elements 402).

As per claim 7, Smeets teaches prompting a user input of the shared secret at the second apparatus (0032; 0115).

As per claim 8, Smeets teaches the shared secret comprises a secret PIN (0032; 0115).

As per claim 9, Smeets teaches the algorithm creating the secret key uses a random number communicated between the first apparatus and the second apparatus (0120).

As per claim 10, Smeets teaches the algorithm creating the secret key uses an identifier of one of the first apparatus and the second apparatus, communicated between the first apparatus and the second apparatus, in the creation of the secret key (0125-0126).

As per claim 11, Smeets teaches re-using the stored shared secret to join a third apparatus to the radio communications network without contemporaneous user input of the shared secret at the first apparatus, comprising: making the stored shared secret available at the third apparatus; and creating in the first apparatus, using the shared secret, a secret key; and making the secret key available to the third apparatus [0016] for use in pairing the third apparatus and the first apparatus to secure communication between them [0019; the access code is stored and generated at the first device, any second or third device may enter a pairing without any user input at the first device [service device].

As per claim 12, it is rejected for same reasons as claim 1.

As per claim 13, Smeets teaches where the algorithm uses one of the stored shared secret and the shared secret entered by the user as an input to the algorithm (0124-0125).

As per claim 14, Smeets teaches an apparatus comprising:
a user interface (0124);

a memory storing a shared secret for use in securing communications in a radio communications network comprising the apparatus (0013) and one or more additional apparatus, wherein the stored shared secret is associated with an operational mode of the apparatus (0014);

a radio transceiver configured to communicate in the network and to receive a signal from the one or more additional apparatus to establish communication with the apparatus on the communications network, where the signal comprises a request for a required service from the apparatus (0016-0017);

at least one processor configured to determine whether the apparatus is in an operational mode where a user of the apparatus does not want to be interrupted and whether the required service is associated with the stored shared secret [In this limitation the notion a user not wanting to be interrupted does not carry much patentable

weight because the desires of the user cannot be measured. For example, a user could put a do-not-disturb message on his buddy list. However, cases can be made for times when he/she would still want to be interrupted (like an emergency) when in that mode. Likewise, a user may still not want to be interrupted by annoying people even if he/she is in an available mode. For purposes of examining the "not wanting interruption" is interpreted as a function in which the apparatus can still authenticate without the user having to do any of the normal pairing/inputs, as in the case when the second apparatus has already been prior recognized by the first apparatus and can merely be automatically reconnected. Smeets teaches this arrangement in which the user need not be interrupted to reconnect his apparatus to the first apparatus (0019 and Fig. 4); and

the at least one processor configured, for the case where it is determined that the apparatus is in the operational mode where the user of the apparatus does not want to be interrupted and the required service is associated with the stored shared secret, to create a secret key for use in pairing the apparatus and the one or more additional apparatus to secure communication between them, where the secret key is created using an algorithm (0019 and 0041), or else

the user interface configured to prompt the user of the apparatus to enter a secret associated with the requested service [even though the user handles the second

apparatus, he/she is subscribing to the services afforded by the first apparatus. Thus the user is also a user of the first apparatus; 0124].

As per claim 15, Smeets teaches where the algorithm uses one of the stored shared secret and the shared secret entered by the user as an input to the algorithm (0124-0125).

As per claim 18, Smeets teaches the at least one processor is configured, in response to the determining, to access the secret in the memory to create the secret key without user intervention (0019).

As per claim 19, Smeets teaches the at least one processor is configured to automatically create the secret key in response to the received signal (0041).

As per claim 20, Smeets teaches the stored shared secret is independent of an origin of the received signal [access key code is independently generated before the received signal; 0013].

As per claim 21, Smeets teaches the secret key is dependent upon an origin of the received signal [uses input from the apparatus which sent the received signal; 0127].

As per claim 23, Smeets teaches the request includes a random value used with at least the stored shared secret to create the secret key (0120).

As per claim 24, Smeets teaches the at least one processor is configured, in a first mode, to obtain a secret by accessing the shared secret stored in the memory

(0014), is configured, in a second mode, to obtain a shared secret by enabling user input of data (0115), and is configured, in the first mode and in the second mode, to create, using the obtained shared secret, the secret key for use in pairing the apparatus and the one or more additional apparatus to secure communication between them (0041).

As per claim 26, Smeets teaches the memory stores an apparatus identifier [BD ADDR] for use with at least the stored shared secret to create the secret key (0123-0127).

As per claim 27, Smeets teaches the user interface is configured to program the value of the stored shared secret (0115).

As per claim 28, Smeets teaches the secret key is for use in securing all communications in the network (0041).

As per claim 30, Smeets teaches the user interface is configured to enable data entry (0115), wherein when the apparatus participates in a different network controlled by a different apparatus the user interface is configured to enter a shared secret stored at the different apparatus (0098) and the at least one processor is configured to create, using the entered shared secret, a secret key for securing communication (0041).

As per claim 34, it is rejected for the same reasons as claim 14.

As per claim 35, it is rejected for the same reasons as claim 1.

As per claim 29, Smeets teaches where the algorithm uses one of the stored shared secret and the shared secret entered by the user as an input to the algorithm (0124-0125).

As per claim 37, Smeets teaches where the algorithm uses one of the stored shared secret and the shared secret entered by the user as an input to the algorithm (0124-0125).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 6, 16, 17, 25, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smeets in view of USP Application Publication 2004/0043790 to Ben-David et al, hereinafter Ben-David.

As per claims 4, 6, 16, 17, and 36 Smeets does not explicitly teach the operational mode is a gaming mode. Smeets teaches the use of PDA, smartphones, and the like to wirelessly communicate securely with others devices in short range to provide many types of services. Ben-David teaches that PDA has numerous operating modes such as a gaming mode (0102). Ben-David teaches PDAs can operate gaming

modes with Bluetooth and other wireless short range communication protocols. These PDAs seem to be in close function and nature to the system and method of Smeets. For example two users within close proximity could play games together or separately. Therefore it would have obvious to one of ordinary skill in the art at the time of the invention to use the PDA's of Ben-David teaching in system of Smeets because it adds another type of service for the user's enjoyment. One of ordinary skill in the art knows the many features of PDAs and their ability to wirelessly communicate. Substituting various models would lead to predictable results.

As per claim 25, Smeets does not explicitly teach the first mode is an interactive gaming mode and second mode is an idle mode. Smeets teaches the use of PDA, smartphones, and the like to wirelessly communicate securely with others devices in short range. Ben-David teaches that PDA has numerous operating modes such as a gaming mode (0102) and sleep (idle) mode (0298). Ben-David teaches, PDAs can operate gaming modes with Bluetooth and other wireless short range communication protocols. These PDAs seem to be in close function and nature to the system and method of Smeets. They also offer a sleep mode to conserve battery life. Being able to communicate in both modes would greatly improve the convenience of the system. For example two apparatus within close proximity could play games together. And if one device is idling it could still be awoken to perform the needed duty of authentication. Therefore it would have obvious to one of ordinary skill in the art at the time of the invention to use the PDA's of Ben-David teaching in system of Smeets because it adds to the conservation of battery power. One of ordinary skill in the art knows the many

features of PDAs and their ability to wirelessly communicate. Substituting various models would lead to predictable results.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **MICHAEL R. VAUGHAN** whose telephone number is (571)270-7316. The examiner can normally be reached on Monday - Thursday, 7:30am - 5:00pm, EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on 571-272-7589. The fax

phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. R. V./

Examiner, Art Unit 2431

/William R. Korzuch/

Supervisory Patent Examiner, Art Unit 2431